

# Weekly report (2012.11.12~11.18)

## Done

- 1) Continue debug the MPI communication in the Meteorology Project, still can't work out.
- 2) Two papers:
  - a) **Variational Shape Approximation**  
<http://www1.idc.ac.il/icgf/graphicsseminar2006/variationalShape04.pdf>  
It's about approximation of complex 3D datasets, this paper shows that take normal field into consideration, when measure the difference between the proxy plane and the original mesh, achieves better performance. It shows that normal field is important to humans perceive, just like the opacity in volume rendering.
  - b) **Context-aware Volume Modeling of Skeletal Muscles**  
[https://engineering.purdue.edu/purpl/level2/papers/EuroVis09\\_Mus.pdf](https://engineering.purdue.edu/purpl/level2/papers/EuroVis09_Mus.pdf)  
Similar to "WYSIWYP What You See Is What You Pick" in classifying the volume data, but I don't know why classification is needed.

## To Do

- 1) Put some new ideas into my implementation of segmenting a model.